# STATE OF UTAH DEPARTMENT OF ENVIRONMENTAL QUALITY DIVISION OF WATER QUALITY SALT LAKE CITY, UTAH

#### FACT SHEET/STATEMENT OF BASIS

## UTAH POLLUTANT DISCHARGE ELIMINATION SYSTEM (UPDES) GENERAL PERMIT FOR CONCENTRATED ANIMAL FEEDING OPERATIONS (CAFOs)

UPDES Permit Number UTG08000

#### INTRODUCTION AND BACKGROUND

In 2003 the Environmental Protection Agency (EPA) issued the federal CAFO Rule. The rule was taken to court by farm industry groups and environmental groups. In February 2005, the Second Circuit Court ruled on the petitions of the 2003 rule. As a result of the Second Circuit Court ruling, EPA was required to amend the 2003 rule. In 2008, EPA issued a final rule to follow the 2005 Second Circuit Court decision. The CAFO Rule again was taken to court when industry groups took elements of the 2008 CAFO rule to the Fifth Circuit Court. In July 2012, EPA issued a final rule to implement the Fifth Circuit Court decision. The most significant result of the court proceedings was that only discharging CAFOs, regardless of the storm event size, require a National Pollutant Discharge Elimination System (NPDES) CAFO permit.

#### APPROPRIATENESS OF THE GENERAL PERMIT

The Division of Water Quality (DWQ) is authorized by EPA to implement the NPDES CAFO Program in Utah, which is referred to as the UPDES permit and program. As such, DWQ must implement the federal CAFO requirements in Utah. In July 2013, DWQ issued a state rule that reflects the federal CAFO requirements. In addition to the new state rule, DWQ is now issuing this general CAFO permit to implement federal and state requirements for CAFOs that require a permit. The coverage area of the permit is the State of Utah, except Indian lands.

Utah Administrative Code (UAC) R317-8-2.5 and R317-8-10 authorizes the issuance of this general permit. The purpose of this permit is to protect water quality from potential pollution sources resulting from the operation of CAFOs in the state.

#### CAFO GENERAL PERMIT REQUIREMENT

Permit coverage is required for animal production facilities that are animal feeding operations (AFOs) and are: 1) large CAFOs that discharge, 2) medium CAFOs, or 3) small or medium AFOs that are designated CAFOs. In addition, large CAFOs that discharge storm water to surface waters of the state from land application areas may require a permit. Illegally discharging non-traditional AFOs such as emu, mink, ostrich, bison, elk, deer, etc. will require a CAFO permit if DWQ determines the facility needs a permit. Without established large CAFO threshold numbers, DWQ will use best professional judgment to determine whether a permit is needed for a non-traditional CAFO. In addition, AFOs and CAFOs not required to obtain the permit may voluntarily obtain permit coverage if they so desire.

#### **Land Application Area Discharges**

All large CAFOs, permitted and un-permitted, are subject to the requirements of 40 CFR 122.23(e) and 40 CFR 122.42(e) where storm water from land application areas discharge to surface waters of the state. Storm water runoff to surface waters of the state from land application areas without proper nutrient management per 40 CFR 122.23(e) and 122.42(e)(1)(vi)-(ix) will require the CAFO permit or an UPDES Storm Water permit. Examples of proper nutrient management include the application of nutrients at crop agronomic rates and the monitoring of soils and manure for phosphorus and nitrogen content.

#### AFO and CAFO Facility Definitions

"Animal feeding operation" means a lot or facility (other than an aquatic animal production facility) where the following conditions are met:

- 1. animals have been, are, or will be stabled, housed, or confined and fed or maintained for a total of 45 days or more in any 12-month period,
- 2. crops, vegetation, forage growth, or post-harvest residues are not sustained in the normal growing season over any portion of the lot or facility, and
- 3. two or more AFOs under common ownership are considered to be a single AFO if they adjoin each other or if they use a common area or system for the storage or disposal of waste.

"Large CAFO" means an AFO that stables, houses, or confines the type and number of animals that fall within any of these ranges:

1.	Beef, calves, heifers, and/or veal	1,000 or more
2.	Cows (milking and dry)	700 or more
3.	Layers, broiler (wet system)	30,000 or more
4.	Chickens other than layers (dry system)	125,000 or more
5.	Layers (dry system)	82,000 or more
6.	Turkeys	55,000 or more

7.	Swine (55 pounds or more)	2,500 or more
8.	Swine (less than 55 pounds)	10,000 or more
9.	Sheep and lambs	10,000 or more
10.	Horses	500 or more
11.	Ducks (dry system)	30,000 or more
	Ducks (wet system)	5,000 or more

"Medium AFO" means a lot or facility that is an AFO that stables, houses, or confines the type and number of animals that fall within any of these ranges:

1.	Beef, calves, heifers, and/or veal		300-999
2.	Cows (milking and dry)		200-699
3.	Layers, broiler (wet system)		9,000-29,999
4.	Chickens other than layers (dry system)		37,500-124,999
5.	Layers (dry system)		25,000-81,999
6.	Turkeys		16,500-54,999
7.	Swine (55 pounds or more)	2	750-2,499
8.	Swine (less than 55 pounds)		3,000-9,999
9.	Sheep and lambs		3,000-9,999
10.	Horses		150-499
11.	Ducks (dry system)		10,000-29,999
12.	Ducks (wet system)	6	1,500-4,999
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"Medium CAFO" means an AFO that confines the number of animals to be classified as a Medium AFO, and where the following conditions are found:

- 1. Pollutants are discharged into surface waters of state through a man-made ditch, flushing system, or other similar man-made device; or
- 2. Pollutants are discharged directly into surface waters of the state which originate outside of and pass over, across, or through the facility or otherwise come into direct contact with the animals confined in the operation.

"Designated CAFO" means an AFO that is designated as a CAFO by the Director according to criteria in 40 CFR 122.23(c) and is thereby required to obtain a UPDES permit. Only small or medium AFOs that discharge can be designated as a CAFO for discharges and other conditions that warrant designation.

#### **CAFO PERMIT APPLICATION**

In order to obtain the CAFO permit, facilities must submit the permit application. The CAFO permit application consists of: 1) a completed notice of intent (NOI) form, and 2) a Natural Resources Conservation Service (NRCS) certified planner approved nutrient management plan (NMP).

#### Notice of Intent and Nutrient Management Plan Submission

A NOI may be obtained on the DWQ website at <a href="http://www.waterquality.utah.gov/UPDES.updes\_f.htm">http://www.waterquality.utah.gov/UPDES.updes\_f.htm</a>. The form must be completed and signed by the operator or owner of the facility, or other person authorized to sign the NOI.

The NMP submitted must be approved by a NRCS certified planner. In addition, DWQ must approve the NMP prior to permit coverage for the facility. If deficiencies are found following DWQ's review of the NMP, DWQ will notify the producer that the NMP requires modification. The producer will be given a specific amount of time to correct any deficiencies in the NMP.

The NOI, and NMP, must be submitted to:

AFO/CAFO Program Coordinator Division of Water Quality 195 North 1950 West P.O. Box 144870 Salt Lake City, UT 84114-4870

#### Permit Application Approval

Once the application is approved by DWQ, the NOI and NMP will be public noticed on the DWQ website <a href="http://www.waterquality.utah.gov/PublicNotices">http://www.waterquality.utah.gov/PublicNotices</a> for thirty days of public comment. Once the permit application is approved, the CAFO will be assigned a permit number and a letter will be sent to the facility informing the owner/operator of permit coverage. Once permit coverage is issued, the facility is responsible for compliance to the permit and all its requirements.

#### Annual Permit Fee

Once the CAFO permit coverage has been approved, the new CAFO permittee will be sent an invoice for the CAFO permit fee. Currently, the annual CAFO permit fee is \$110 and is billed in August of each year with 30 days to remit payment.

#### PERMIT APPLICATION DEADLINES

CAFOs have different application deadlines depending on the type of facility and when the CAFO commenced operation.

#### **Existing AFOs and CAFOs**

An AFO or CAFO operation that discharges or has an operational change that results in a requirement to obtain a UPDES CAFO permit shall submit an application no later than 90 days after the time a facility has conditions that require CAFO permit coverage.

#### Permitted CAFOs

No later than 180 days before the expiration of a permit, or as provided by the Director, a permitted CAFO must submit an application to renew its permit, unless the CAFO will not discharge upon expiration of the permit.

#### New CAFOs

CAFOs constructed after December 4, 2008 and that require permit coverage must apply for permit coverage no later than 180 days prior to the time that coverage is required.

#### Designated CAFOs or CAFOs with Individual CAFO Permit

Designated CAFOs or CAFOs with an individual permit must submit a permit application no later than 60 days after the date that the facility was notified by DWQ of CAFO designation or individual permit requirement.

## EFFLUENT LIMITATIONS GUILDELINES (ELGs) AND BEST MANAGEMENT PRACITCES (BMPs)

#### Compliance to State Water Quality Standards by All CAFOs

All facilities are required to comply with water quality standards in R317-2-7.1, R317-2-14, and R317-2-7.2.

#### Production Area ELGs for all CAFOs, Except New Poultry, Swine, and Veal

No discharges of manure, litter, compost, wastewater, or other pollutants are allowed except following a 25-year, 24-hour storm event from a permit compliant facility. The production area must be properly designed, constructed, operated, and maintained to prevent discharge of pollutants to surface waters of the state up to a 25-year, 24-hour storm event. Waste containment structures must be properly managed to maintain freeboard for the 25-year, 24-hour storm event. The permittee is required to manage the production area such that the facility complies with permit requirements, permit BMPs, and the NMP developed for the facility.

## Production Area ELGs for all New Source Poultry, Swine, and Veal (constructed after 12/4/08)

No discharges of manure, litter, compost, wastewater, or other pollutants are allowed. New source poultry, swine, and veal CAFOs must demonstrate that they have designed their open containment systems to comply with the no discharge requirement of the federal rule through the use of the most recent version of NRCS Animal Waste Management (AWM) software or equivalent, and the most recent version of NRCS Soil Plant Air Water (SPAW) Hydrology Tool or an equivalent model.

#### Land Application Area Effluent Limitations and Standards for All CAFOs

There shall be no discharge of pollutants to surface waters of the state from land applications except when land application areas are managed in accordance with the facility's NMP. This includes no land application to saturated, frozen, or snow-covered ground unless NRCS Practice 590, Nutrient Management and Utah Manure Application Risk Index (UMARI) are followed. All permitted CAFOs must land apply manure, litter, compost, wastewater, or other nutrients according NRCS Practice 590 and 40 CFR 122.42(e)(1)(vi)-(viii).

#### **Duck CAFOs**

Any duck CAFOs must comply with the Fecal coliform and Biological Oxygen Demand (BOD5) effluent limitations established by the best practicable control technology (BPT) in 40 CFR 412.22.

#### Production Area Best Management Practices and Prohibitions Applicable to all CAFOs

#### All CAFOs must do the following:

- 1. Perform weekly visual inspections of waste structures;
- 2. Perform daily visual inspections of water lines;
- 3. Install depth markers in waste storage structures;
- 4. Perform weekly inspections of impoundments and tanks;
- 5. Correct deficiencies found during inspections;
- 6. Maintain proper freeboard;
- 7. Maintain records required to document compliance to the BMPs;
- 8. Prevent 100-year flood event inundation and flow into the production area;
- 9. Prevent discharge of pollutants into groundwater with hydrologic connection to surface waters of the state.

#### NUTRIENT MANAGEMENT PLAN CONTENT AND REQUIREMENTS

A nutrient management plan is required by permitted CAFOs per 40 CFR 122.23(h) and 122.42 (e). NMPs must follow applicable NRCS practices. Compliance to the NRCS Practice 590, Nutrient Management, is required for all CAFOs. Specific NMP content and provisions are provided below.

#### Required NMP Content

#### The following is required for all NMPs:

- 1. Ensure adequate storage of manure and process wastewater, including procedures to ensure proper operation and maintenance of the impoundments and structures.
- 2. Ensure proper management of animal mortalities to prevent discharge of pollutants to surface waters of the state. Mortalities shall be managed to ensure that they are not disposed of in any liquid manure, storm water, or process

- wastewater storage system or other structure that is not specifically designed to treat and/or dispose of animal mortalities.
- 3. Ensure that clean water is diverted, as appropriate, from the production area.
- 4. Prevent direct contact of confined animals with surface waters.
- 5. Ensure that chemicals and other contaminants handled on-site are not disposed of in any manure, storm water, or process wastewater storage system unless specifically designed to treat such chemicals and other contaminants.
- 6. Identify site-specific conservation practices that will be implemented, including as appropriate, buffers or equivalent practices, to control runoff of pollutants to surface water. Depending on proximity to surface waters or wells, required setbacks may need to be established in the NMP.
- 7. Identify the protocols for appropriate sampling and testing manure, process wastewater, and soil.
- 8. Establish protocols to land apply manure or process wastewater in accordance with site specific nutrient management practices that ensure appropriate agricultural utilization of the nutrients in the manure or process wastewater.
- 9. Identify specific records that will be maintained to document the implementation and management of the minimum NMP elements.

#### Required NMP Planning Approach

The federal CAFO Rule provides two types of NMP planning approaches; linear and narrative. DWQ recommends utilizing the narrative approach because it provides greater flexibility in nutrient management planning. The requirements for the narrative rate approach are outlined in the permit and this fact sheet. For any CAFO that selects the linear approach, guidelines are found in 40 CFR 122.42(e)(5)(i).

#### Required Nutrient Management Plan Content that are Permit Terms

Certain NMP terms are required to be incorporated into the permit as permit conditions. These NMP elements must be public noticed as part of the permit upon permit issuance and any permit modifications. Required permit elements are outlined in the permit, Sections IX and X.

#### CHANGES TO NUTRIENT MANAGEMENT PLANS

Nutrient management plans must be revised when needed. CAFOs must implement a NMP that reflects current practices, facilities, and conditions at the CAFO. Certain NMP changes will require public notice and permit modification.

#### Notification Requirement

When a CAFO makes changes to an approved NMP, the CAFO owner or operator must notify DWQ of the changes. Certain NMP changes require public notice for comment while some changes will require permit modification. DWQ will notify the CAFO when a public notice or permit modification is required. When required, DWQ will post proposed NMP changes on the UDEQ website for 30 days to receive public comment on the changes.

#### Permit Modification Requirement

For substantial changes to the terms of the NMP, a permit modification is required since certain NMP terms are incorporated into the permit as permit requirements. DWQ will notify the CAFO when a permit modification is needed. Specific NMP content changes that require permit modification are found in Section X of the permit.

#### OTHER PERMIT REQUIREMENTS

#### Transfer of Manure, Litter, Compost, and Process Wastewater to Other Persons

When manure is sold or given away, the permittee must:

- 1. Maintain records of the date and amount of manure, litter, compost, and wastewater that leave the operation on an annual basis;
- 2. Record the name and address of the recipient;
- 3. Provide the recipient with representative information on phosphorus and nitrogen content; and
- 4. Retain the records for five years.

#### Annual Report Requirements

Prior to April first 1<sup>st</sup> of each year, an annual report must be submitted to DWQ. The annual report must report the following information:

- 1. All discharges and instances of noncompliance, including those discharges required to be reported within 24 hours;
- 2. The number and type of animals, whether in open confinement or housed under roof;
- 3. Estimated amount of total manure, litter, compost and process wastewater generated by the CAFO in the previous 12 months (tons/gallons);
- 4. Estimated amount of total manure, litter, compost and process wastewater transferred to other persons by the CAFO in the previous 12 months (tons/gallons);
- 5. Total number of acres for land application covered by the NMP;
- 6. Total number of acres under control of the CAFO that were used for land application of manure, litter, compost and process wastewater in the previous 12 months;

- 7. A statement indicating whether the current version of the CAFO's NMP was approved by a certified nutrient management planner; and
- 8. The following nutrient management planning information:
  - a. the actual crop(s) planted and actual yield(s) for each field;
  - b. the actual nitrogen and phosphorus content of the manure, litter, compost, and process wastewater;
  - c. the results of the calculations conducted in accordance with the Narrative Rate Approach;
  - d. the amount of manure, litter, compost, and process wastewater applied to each field during the previous 12-months;
  - e. for CAFOs utilizing the Narrative Rate Approach, the following information must be included in the annual report:
    - i. the results of any soil testing for nitrogen and phosphorus taken during the preceding 12 months,
    - ii. the data used in calculations to determine maximum amounts of manure, compost, litter, and process wastewater to be land applied at least once each year using Paragraph IX.C.1.d., and
    - iii. the amount of any supplemental fertilizer applied during the previous 12 months.

#### Facility Closure

CAFOs must properly close waste storage facilities and the CAFO so that discharges will not occur. CAFOs must follow NRCS Practice 360 for facility closure.

#### Emergency Spill and Discharge Response Plan

The permit requires CAFOs to develop an Emergency Spill and Discharge Response Plan. CAFOs have a duty to mitigate any environmental damage and clean-up contamination to the extent possible. The Emergency Spill and Discharge Response Plan outlines what will be done to address discharges from a CAFO.

All discharges must be reported within 24-hours to DWQ and the AFO/CAFO Program Coordinator (801) 536-4300, unless the discharge is a threat to the environment or threatens human health. In any case of threat to the environment or human health, DWQ must be immediately notified by calling the DEQ Emergency Reporting Line at (801) 536-4123.

#### Required Discharge and Noncompliance Reporting

When a discharge to surface waters of the state occurs or other release, the permittee must report the discharge to DWQ:

- 1. The permittee shall orally report any discharge to surface waters of the State within 24 hours from the time the permittee first became aware of the discharge by calling DWQ and the AFO/CAFO Program Coordinator at (801) 536-4300. Any discharge or other noncompliance that may endanger health or the environment shall be reported immediately (sooner than 24 hours) by calling the DEQ Emergency Reporting Line at (801) 536-4123.
- 2. In addition, a written report shall be provided within five days of the time that the permittee becomes aware of the discharge.
  - a. Reports shall be submitted to: AFO/CAFO Program Coordinator, 195 North 1950 West
     PO Box 144870
     Salt Lake City, Utah 84114-4870.

### GENERAL INSPECTION, MONITORING, AND RECORD KEEPING REQUIREMENTS

#### Facility and Records Access

The permittee shall allow DWQ, or authorized representative of DWQ, upon presentation of credentials and other documents required by law access to the facility and relevant records.

#### Required Records for Permit Compliance

Specific records that must be maintained onsite are listed in section XII C. of the permit.

1.

#### SIGNIFICANT CHANGES FROM PREVIOUS PERMIT ISSUED IN 2000

New effluent limitations and guidelines and new NMP and BMP requirements were included in the July 2012, federal CAFO Rule. Due to changes in the federal rule there are many differences between the previous CAFO permit and the new CAFO permit. Under the new permit, permits are required for any discharge resulting from a storm event of any size. The previous permit required permits only for discharges under the 25-year, 24-hour storm event.

#### Permit Requirement Changes

In the previous permit, CAFOs that discharged to waters of the state under the 25-year, 24-hour storm event were required to obtain the permit. The new permit requires a

CAFO to obtain a permit for discharges to surface waters of state, regardless of how large or how small the amount of precipitation the facility received. In addition, as required by the new federal rule, the new permit requires permitting of large CAFOs that discharge from land application areas that do not have proper nutrient management practices in 40 CFR 122.23(e) and 122.42(e)(1)(vi)-(ix). CAFOs with illegal discharges from land application areas require permitting under the CAFO permit or an UPDES Storm Water permit.

#### Permit Application and Nutrient Management Plan

The previous permit required a comprehensive nutrient management plan (CNMP), which is equivalent to a NMP, to be developed and implemented within three years of a facility's permit coverage. The CNMP was approved by a NRCS certified planner without required input from DWQ on the development or approval of the CNMP. Under the new permit, NMPs must be submitted to DWQ prior to permit coverage being granted. The new NMP must be approved by a NRCS certified planner, but now the NMP must also be approved by DWQ prior to permit coverage.

#### Public Notice of NMPs

Under the previous permit, NMPs were retained on the CAFO production site and made available to DWQ inspectors during inspections. The NMP was not public noticed. Under the new federal rule, NMP requirements are now part of the permit. The new permit requires that the NMP be public noticed as part of the permit and permit application prior to permit issuance. The NMP is open for public comment on DWQ website for 30 days.

#### Annual Permit Fee

Permit fees under the previous permit were a one-time fee of \$500 which covered five years of permit coverage. Under the new permit, the annual permit fee of \$110 is submitted on an annual basis. Permit fees are subject to change on an annual basis as approved by the Utah Legislature.

#### Effluent Limitations Guidelines (ELGs) and Best Management Practices (BMPs)

Production Area ELGs for all New Source Poultry, Swine, and Veal (constructed after 12/4/08).

The ELG for poultry, swine, and veal was based on the 25-year, 24-hour storm event under the previous permit. Facilities were designed and constructed to contain the 25-year storm event. Under the new permit, there is a no discharge standard for new poultry, swine, and veal CAFO constructed after December 4, 2008. The no discharge design standard is achieved by demonstrating the open containment structures have been designed, constructed, operated, and maintained to comply with the most recent version of NRCS Animal Waste Management (AWM) software or equivalent, and the most recent version of NRCS Soil Plant Air Water (SPAW) Hydrology Tool or an equivalent model.

Land Application Area Effluent Limitations and Standards for All CAFOs.

The previous permit required compliance to NRCS Practice 590, Nutrient Management. The new permit requires compliance to Practice 590 and also 40 CFR 122.42(e)(1)(vi)-(viii) to have allowed storm water discharges to surface waters of the state from land application areas.

Production Area Best Management Practices (BMPs) and Prohibitions.

The following are BMPs under the new permit that were not included in the previous permit:

- 1. Perform weekly visual inspections of waste storage structures;
- 2. Perform daily visual inspections of water lines;
- 3. Install depth markers in waste storage structures;
- 4. Perform weekly inspections of impoundments and tanks;
- 5. Correct deficiencies found during inspections;
- 6. Prevent discharge of pollutants into groundwater with hydrologic connection to waters of the state.

#### NMP Planning Approach

The federal CAFO Rule provides two types of NMP planning approaches; linear and narrative. The previous permit did not require a specific planning approach. In the new permit, DWQ recommends utilizing the narrative approach because it provides greater flexibility in nutrient management planning. The requirements for the narrative rate approach are outlined in the new permit.

#### Nutrient Management Plan Content that are Permit Terms

Under the previous permit, CNMPs (NMPs) were considered separate documents from the permit. In the new permit, the NMP is incorporated into the permit as permit required conditions. Under the new permit, any change to the NMP is a permit change.

#### NMP Changes and Permit Modification

The previous permit did not require public notice of NMP changes. The new permit requires that NMP changes be public noticed. Some NMP changes that will require modification are specifically listed in the permit.

#### Other Permit Requirements

Annual Report Requirements.

An annual report was not required in the previous permit. The new permit requires an annual report to be submitted to DWQ. The permit outlines the required content of the annual report.

Emergency Spill and Discharge Response Plan.

The previous permit did not require an emergency spill and discharge response plan. The new permit requires the plan to minimize environmental damage resulting from a discharge. In addition, all discharges must be reported to DWQ within 24 hours.

#### General Inspection, Monitoring, and Record Keeping Requiements

Required Records for Permit Compliance.

The following are record keeping requirements of the new permit that are not included in the previous permit:

1. Copies of annual reports;

- 2. Weather conditions at times of land applications and 24 hours prior to applications;
- 3. Methods and protocols used to sample and analyze soil, manure, litter, compost, or process wastewater;
- 4. Records of daily water line inspections;

5. Description for the basis for determining application rates;

- 6. Calculations showing the total nitrogen and phosphorus applied to each field, including sources other than manure, litter, compost, or process wastewater;
- 7. Dates of manure application equipment inspections and calibrations;
- 8. Weekly inspections of structures and impoundments;

9. Weekly freeboard readings;

- Records documenting corrective actions. Deficiencies not corrected within 30 days must be accompanied by an explanation of the factors preventing immediate correction; and
- 11. Records documenting the current design of any manure, litter, compost, and process wastewater storage structures, including volume for solids accumulation, design treatment volume, total design volume, and approximate number of days of storage capacity.

#### PERMIT DURATION

This permit is scheduled to be effective for five (5) years from date of permit issuance.

#### PUBLIC NOTICE INFORMATION

**Began:** June 9, 2014 **Ended:** July 9, 2014

Public Notice Publication: Deseret News & Salt Lake Tribune, as well as DWO

website.

This permit has been prepared in compliance to the federal CAFO rule in 40 CFR and the state CAFO rule in *Utah Administrative Code R317-8-10*.

The permit was drafted by Don Hall, AFO/CAFO Program Coordinator, Utah Division of Water Quality, April 28, 2014.

For questions or assistance regarding the permit or this fact sheet, please contact DWQ's AFO/CAFO Program Coordinator at (801) 536-4492.